HINGE PARTICULARLY ADAPTED FOR USE WITH A FALSE CABINET FRONT

BACKGROUND OF THE INVENTION

In general, this invention relates to a hinge for mounting a closure member for swinging between open and closed positions relative to a fixed member. While the hinge of the invention will find many applications, it is particularly useful in attaching a so-called false front to a lower kitchen cabinet.

A false front is a member which is located at the upper front portion of a cabinet just above the doors of the cabinet and just below the countertop. The false front usually is associated with a cabinet for a sink and its inner side usually carries a tray for storing different items such as scrub pads, brushes or the like. False fronts also are used with bathroom vanities.

To enable access to the items in the tray, the false front is hinged to the cabinet so as to be capable of swinging downwardly and outwardly from an upright closed position to a vertically inclined open position. A hinge is located at each end of the false front and is attached to the cabinet in order to mount the false front for swinging between its closed and open positions. Mitts et al U.S. Pat. No. 4,756,054 discloses a hinge which is especially designed for use with a false front for a cabinet.

SUMMARY OF THE INVENTION

The primary aim of the present invention is to provide a new and improved hinge which, when used with a false cabinet front, permits the front to be opened to a position enabling more convenient access to the items in the tray which is carried by the false front.

Another object of the invention is to provide a hinge which permits the false front to be mounted in very close proximity to the tops of the cabinet doors and to the underside of the cabinet countertop.

Still a further object is to provide a hinge which permits the false front to open smoothly and without binding even though the false front is pulled open only from one end.

The invention also resides in the provision of a hinge having pivotable and slidable links which are uniquely arranged and guided in order to achieve the foregoing objects.

Further, the invention is characterized by novel bushings which support the links for pivoting and sliding, which enable the hinge to operate quietly and which facilitate easy assembly of the components of the hinge.

These and other objects and advantages of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view of a typical cabinet having a false front which is swingably mounted by new and improved hinges incorporating the unique features of the present invention, the false front being shown in a fully open position.

FIG. **2** is an enlarged fragmentary cross-section taken substantially along the line **2—2** of FIG. **1**.

FIG. **3** is a view similar to FIG. **2** but shows the false front in its fully closed position.

FIG. **4** is an elevational view of the inner side of the false front and the hinges, the view being taken along the line **4—4** of FIG. **3**.

FIGS. **5**, **6** and **7** are enlarged fragmentary crosssections taken substantially along the lines **5—5**, **6—6** and **7—7**, respectively, of FIG. **3**.

FIG. **8** is an enlarged fragmentary cross-section taken substantially along the line **8-8** of FIG. **2** and shows one of the links and one of the bushings of the hinge.

FIG. **9** is an enlarged exploded view of the link and the bushing shown in FIG. **8**.

FIG. **10** is a side elevational view of the bushing shown in FIG. **9**.

FIG. **11** is an enlarged exploded perspective view of the link and the bushing shown in FIG. **8**.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

For purposes of illustration, the invention has been shown in the drawings in conjunction with a kitchen cabinet **20** having a fixed base member **21**, a countertop **22** supported by the base **21**, a sink **23** located in the countertop **22**, two hinged doors **24**, and a closure member in the form of a false front **25** located just above the upper edges of the doors and just below the forward edge portion of the countertop. The false front is adapted to close a long and comparatively narrow rectangular opening **26** which is formed through the upper end portion of the base **21**. A tray **27** for holding kitchen items is attached to the rear side of the false front **25**. When the false front is upright and is in a closed position shown in FIG. **3**, the tray **27** is disposed in the opening **26** and extends rearwardly into the base. When the false front is pulled downwardly and outwardly away from the base to an open position (FIGS. **1** and **2**), the tray moves out of the base to enable access to th items in the tray.

The false front **25** is supported on the base **21** to swing between its closed and open positions by a pair of hinges **30**, there being one hinge at each end of the false front. The two hinges are identical in principle and differ from one another only to the extent necessary to enable one hinge to be installed at the left end of the false front and to enable the other hinge to be installed at the right hand of the false front. Only the right hinge has been shown in detail in the drawings.

The present invention contemplates the provision of a new and improved false front hinge **30** which enables the false front to be moved downwardly and outwardly from the base **21** to a position in which the articles in the tray **27** are very easily accessible. In addition, the hinge permits the upper and lower edges of the false front to be located closely adjacent the underside of the countertop **22** and the upper edges of the doors **24**, respectively, so that unattractive gaps of substantial width may be avoided. The hinge of the invention also enables the false front to be opened easily even though the pulling force may be applied only to one end portion of the front and not to the center or both end portions of the front.

More specifically, the hinge **30** includes a fixed mounting bracket **31** and a movable mounting bracket **32**. The fixed bracket **31** is a flat plate which is located in the opening **26** at one end thereof and which is secured to the base **21** by screws **33**. The bracket **31** is disposed in a vertical plane which extends perpendicular to the front of the base. As shown in FIG. **2**, the forward edge of the bracket **31** is in the same vertical